

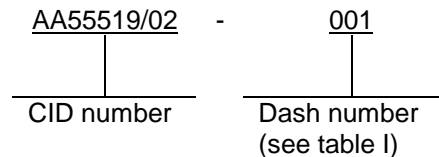
COMMERCIAL ITEM DESCRIPTION
SPECIFICATION SHEET

FUSE, INCLOSED LINK, SUBMINIATURE, SURFACE MOUNT (SM),
TIME DELAY, WITH END CAPS

The General Services Administration has authorized the use of this commercial item description (CID) for all federal agencies.

The complete requirements for procuring SM inclosed link fuses described herein shall consist of this document and the issue in effect of CID A-A-55519.

CLASSIFICATION. This CID uses a classification system which is included in the Part Identification Number (PIN) as shown in the following example (see PIN paragraph in NOTES section).



SALIENT CHARACTERISTICS.

Interface and physical dimensions. Fuses supplied to this CID shall be as specified herein (see figure 1).

Electrical specification.

Voltage rating. The voltage rating shall be 125 V ac and 125 V dc maximum.

Interrupting ratings. The interrupting ratings shall be as indicated in table II.

Opening time characteristics. The opening time characteristics shall be as indicated in table III.

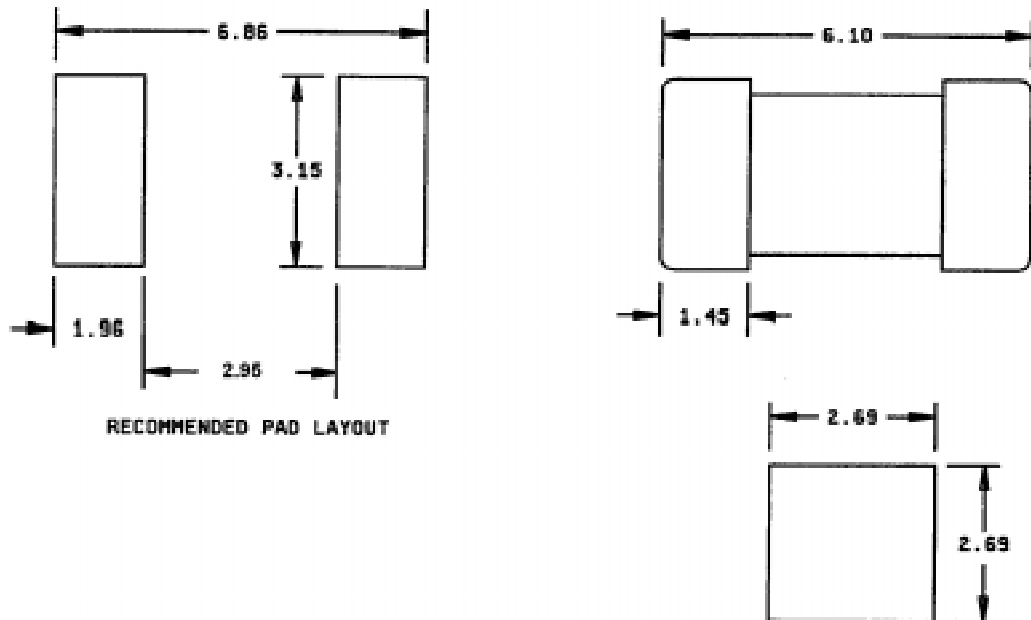
Environmental specifications. Fuses supplied to this CID shall be subject to the following tests and there shall be no electrical or mechanical damage to the fuse.

Operating temperature. The operating temperature shall be -55°C (-67°F) to +125°C (257°F).

Shock. Fuses shall meet shock requirements in accordance with method 213, MIL-STD-202, test condition I (100 g's peak for 6 milliseconds).

Vibration. Fuses shall meet vibration requirements in accordance with method 201, MIL-STD-202, (10 Hz to 55 Hz, 1.52 mm (.060 inch) maximum total excursion).

Insulation resistance (after opening). The insulation resistance after opening shall be 10,000 ohms minimum at 100 volts in accordance with method 302, MIL-STD-202, test condition A.



mm	Inches
1.45	.057
1.96	.077
2.69	.105
3.15	.124
6.10	.240
6.86	.270

NOTES:

1. Dimensions are in millimeters.
2. Tolerance is ± 0.15 mm (0.006 inch), unless otherwise specified.

Figure 1. Configuration and dimensions.

TABLE I. Electrical characteristics

CID dash number AA55519/02- 1/	Ampere rating	Nominal resistance cold ohms	Nominal melting I ² t A ² second
009	0.375	1.20	0.101
010	0.5	0.700	0.240
011	0.75	0.360	0.904
001	1.0	0.225	1.98
002	1.5	0.0930	3.65
003	2.0	0.0625	8.20
004	2.5	0.0450	15.0
005	3.0	0.0340	20.16
006	3.5	0.0224	26.53
007	4.0	0.0186	34.40
008	5.0	0.0136	53.72

1/ The CID dash numbers are listed in ascending numerical order according to ampere rating.

TABLE II. Interrupting ratings.

Ampere (A) range	Interrupting rating
All ampere ratings	50 ampere at 125 V ac
	50 ampere at 125 V dc
	300 ampere at 32 V dc

Resistance to soldering heat. Fuses shall meet resistance to soldering heat requirements in accordance with method 210, MIL-STD-202, test condition B (3 seconds at 260°C (+500°F)).

Thermal shock. Fuses shall meet thermal shock requirements in accordance with method 107, MIL-STD-202, test condition B (-65°C (-85°F) to +125°C (257°F)).

Moisture resistance. Fuses shall meet moisture resistance requirements in accordance with method 106, MIL-STD-202, high humidity (90-98 relative humidity), and heat (65°C(-85°F)).

Salt Spray. Fuses shall meet the salt spray requirements in accordance with method 101, MIL-STD-202, test condition B (48 hours).

Physical specifications.

Materials. Fuses shall have a ceramic body with tin-lead alloy plated brass caps.

Soldering parameters. Fuses shall be able to withstand, without electrical or mechanical damage to the fuse, a wave solder of +260°C (+500°F) for 3 seconds maximum, and a reflow solder of +230°C (+446°F) for 30 seconds maximum.

Solderability. Fuses shall meet solderability requirements in accordance with method 208 of MIL-STD-202.

TABLE III. Rating versus opening time.

Ampere rating	Percent of ampere rating	Opening time
All ampere ratings	100 percent	4 hours, minimum.
	200 percent	1 second, minimum; 60 seconds maximum.
	300 percent	0.2 seconds, minimum; 3 seconds, maximum.
	800 percent	0.02 seconds, minimum; 0.1 seconds, maximum.

PACKAGING. Packaging shall be as specified in A-A55519. In addition, inclosed link fuses may be supplied individually or in a quantity of 1,000 on a 12 mm (.472 inches) wide tape reel in accordance with EIA 481.

NOTES.

PIN. The PIN should be used for Government purposes to buy commercial products to this CID. See classification information for PIN format example.

Commercial and Government Entity (CAGE) code. For ordering purposes, inventory control, and submission of these fuses to DSCC under the Military Parts Control Advisory Group (MPCAG) evaluation program, CAGE code 58536 should be used.

Source of documents.

Department of Defense Standards

MIL-STD-202 - Test Methods for Electronic and Electrical Component Parts.

Commercial Item Description

A-A-55519 - Fuse, Cartridge, Surface Mount (SM), General Requirements for.

(Copies of federal specifications and standards are available from the Document Automation and Production Service, Building 4D (DPM-DODSSP), 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

Other Publications

ELECTRONICS INDUSTRY ASSOCIATION (EIA)

EIA 481 - Taping of Surface Mount Components for Automatic Placement.

(Applications for copies should be addressed to the Electronics Industry Association, 2500 Wilson Boulevard, Arlington, VA 22201-3834.)

(Industry association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

Commercial products. As part of the market analysis and research effort, this CID was coordinated with the following manufacturers of commercial products. At the time of CID preparation and coordination, these manufacturers were known to have commercial products that would meet the requirements of this CID. (NOTE: This information should not be considered as a list of approved manufacturers or be used to restrict procurement to only the manufacturers shown.)

<u>Manufacturer's CAGE</u>	<u>Manufacturer's name and address</u>
75915	Littelfuse, Incorporated 800 E. Northwest Highway Des Plaines, IL 60016-3096 (847) 824-0400

Part number (P/N) supersession data. These CID part numbers supersede the following manufacturers' P/N's as shown. This information is being provided to assist in reducing proliferation in the Government inventory system.

TABLE IV. P/N supersession data.

Dash number (see table I) AA55519/02-	MFR's CAGE	MFR's P/N ^{1/}
001	75915	452001
002	75915	45201.5
003	75915	452002
004	75915	45202.5
005	75915	452003
006	75915	45203.5
007	75915	452004
008	75915	452005
009	75915	452.375
010	75915	452.500
011	75915	452.750

^{1/} The manufacturer's P/N shall not be used for procurement to the requirements of this CID. At the time of preparation of this CID, the aforementioned commercial products were reviewed and could be replaced by the CID P/N shown. For actual part marking requirements see the marking paragraph.

MILITARY INTEREST:

Custodian:
Navy - EC
DLA - CC

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - 7FXE

Preparing Activity:

DLA-CC

Project 5920-0746